alkylthio(amino)imidazole, amino(alkyl)imidazole, oxazole, (alkanoylamino)imidazole, thiazole, aminothiazole, aminooxazole, aminooxadiazole, dialkylimidazole, alkyl(alkanoylamino)imidazole, alkyl(amino)imidazole, arylaminocarbonylamino(alkyl)imidazole, alkoxycarbonylamino(alkyl)imidazole, alkylcarbonylamino(alkyl)imidazole, aminotriazole or diaminopyrimidine;

R<sup>1</sup> is heteroaryl, and R<sup>1</sup> may be unsubstituted or substituted with from one to five substituents; and wherein the R<sup>1</sup> heteroaryl group is selected from

R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are the same or different and are independently H, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyloxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroarylamino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroaryisulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl, polyhaloalkoxy, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy, arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylaminocarbonylamino, alkoxycarbonylamino, alkenyloxycarbonylamino, alkynyloxycarbonylamino, aryloxycarbonylamino, heteroaryloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, alkoxycarbonylamino, I,I-(alkoxyl or aryloxy)2alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino,

pyridine-N-oxide,

$$-N \longrightarrow \mathbb{R}^{8} \longrightarrow \mathbb{R}^{9} \longrightarrow \mathbb{R}$$

(where Q is O or  $H_2$  and n' is 0, 1, 2 or 3) or

Learning Comparison of triazole, -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are independently alkyl, aryl, alkoxy, aryloxy, heteroarylalkyl, heteroarylalkyl, heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkylalkoxy, or cycloheteroalkylalkoxy); and may be optionally independently substituted with from one to five substituents, which may be the same or different;

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are the same or different and are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, or cycloheteroalkyl;

or a pharmaceutically acceptable salt thereof, or a prodrug thereof, and all stereoisomers thereof. --

- -- 2. (Amended) The compound as defined in Claim 75 wherein Z is a heteroaryl group containing 1 to 4 heteroatoms, at least one of which is a nitrogen atom, the heteroaryl group being attached to the rest of the molecule via an available nitrogen or carbon atom. --
  - -- 22. (Twice Amended) The compound as defined in Claim 14 wherein

$$R^2$$
 $R^3$ 
 $R_1$ 
 $R_2$ 
 $R_3$ 
 $R_4$ 
 $R_4$ 
 $R_4$ 

-- 24. (Twice Amended) The compound as defined in Claim 1 wherein

-- 64. (Thrice Amended) A compound having the structure

$$R^2$$
 $R^1$ 
 $R^3$ 
 $R^4$ 
 $R^4$ 

wherein n is 4;

X is N;

Z is a 5- or 6-membered nitrogen-containing monocycle heteroaryl group which is selected from the group consisting of imidazole, aminoimidazole, alkylimidazole, alkylthioimidazole, alkylthio(amino)imidazole, amino(alkyl)imidazole, oxazole, (alkanoylamino)imidazole, thiazole, aminothiazole, aminooxazole, aminooxadiazole, dialkylimidazole, alkyl(alkanoylamino)imidazole, alkyl(amino)imidazole, arylaminocarbonylamino(alkyl)imidazole,

alkoxycarbonylamino(alkyl)imidazole, alkylcarbonylamino(alkyl)imidazole, aminotriazole or diaminopyrimidine:

 $R^1$  is tetrazolyl, pyrazolyl, thiazolyl, pyrimidinyl,  $\stackrel{\sim}{\longrightarrow}$ , oxazole, or triazole; and  $R^1$  may be unsubstituted or substituted with from one to five substituents;

R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are the same or different and are independently H, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyloxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroarylamino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl, polyhaloalkoxy, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy, arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylaminocarbonylamino, alkoxycarbonylamino, alkenyloxycarbonylamino, alkynyloxycarbonylamino, aryloxycarbonylamino, heteroaryloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, alkoxycarbonylamino, I,I-(alkoxyl or aryloxy), alkyl (where the two aryl or alkyl substituents can be independently defined, or linked to one another to form a ring), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino,

$$-\frac{\prod_{1}^{N}}{2} R^{8}$$

pyridine-N-oxide,

$$-\underbrace{N}_{n'}^{R^8}, \underbrace{N}_{n'}^{R^8}, -\underbrace{N}_{n'}^{N}, \underbrace{N}_{n'}^{N}$$

(where Q is O or H2 and n' is 0, 1, 2 or 3) or

NR<sup>8</sup>R<sup>9</sup> O C=CH—C R<sup>8</sup>a; tetrazolyl, pyrazolyl, pyridyl, thiazolyl, pyrimidinyl, imidazole, oxazole, or triazole, -PO(R<sup>13</sup>)(R<sup>14</sup>), (where R<sup>13</sup> and R<sup>14</sup> are independently alkyl, aryl, alkoxy, aryloxy, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylalkoxy, cycloheteroalkyl, cycloheteroalkylalkyl, cycloheteroalkylalkoxy, or cycloheteroalkylalkoxy); and may be optionally independently substituted with from one to five substituents, which may be the same or different;

R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, R<sup>8a</sup> and R<sup>9</sup> are the same or different and are independently hydrogen, alkyl, haloalkyl, aryl, heteroaryl, arylalkyl, cycloalkyl, (cycloalkyl)alkyl, or cycloheteroalkyl;

or a pharmaceutically acceptable salt thereof, or a prodrug thereof, and all stereoisomers thereof. --

-- 73. (Amended) The compound as defined in Claim 64 wherein

Please add the following claims:

-- 75. A compound having the structure

wherein n is 4;

X is N;

Z is a 5- or 6-membered nitrogen-containing monocyclic heteroaryl group;

R<sup>1</sup> is heteroaryl,

and R<sup>1</sup> may be unsubstituted or substituted with from one to five substituents; and wherein the R<sup>1</sup> heteroaryl group is selected from

wherein the R¹ heteroaryl group is substituted with one to five of the following substituents: alkyl, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, alkylcarbonylamino, heteroaryl, halo, aryl, cycloalkylcarbonylamino, arylcarbonylamino, heteroarylcarbonylamino, alkoxycarbonylamino, guanidinyl, nitro, cycloheteroalkyl, aryloxycarbonylamino, heteroaryloxylcarbonylamino, uriedo (where the uriedo nitrogens may be substituted with alkyl, aryl or heteroaryl), heterocyclylcarbonylamino (where the heterocycle is connected to the carbonyl group via a nitrogen or carbon atom), alkylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino,

$$R^{20} \qquad 0$$

$$R^{21} \qquad \qquad N$$

$$R^{22} \qquad \qquad N$$

R<sup>23</sup>, R<sup>24</sup> and R<sup>25</sup> are independently hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl, cycloalkyl, or cycloalkylalkyl;

R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup> are independently hydrogen, halo, alkyl, alkenyl, alkoxy, aryloxy, aryl, arylalkyl, alkylmercapto, arylmercapto, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, hydroxy or haloalkyl; and these substituents may either be directly attached to R<sup>1</sup>, or attached via an alkylene chain at an open position, which substituents may be the same or different from each other and may be the same or different from the base R<sup>1</sup> group;

R<sup>2</sup>. R<sup>3</sup> and R<sup>4</sup> are the same or different and are independently H, alkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyloxy, (alkyl or aryl)<sub>3</sub>Si (where each alkyl or aryl group is independent), cycloalkyl, cycloalkenyl, amino, alkylamino, dialkylamino, alkenylamino, alkynylamino, arylalkylamino, aryl, arylalkyl, arylamino, aryloxy, cycloheteroalkyl, cycloheteroalkylalkyl, heteroaryl, heteroarylamino, heteroaryloxy, arylthio, arylsulfinyl, arylsulfonyl, thio, alkylthio, alkylsulfinyl, alkylsulfonyl, heteroarylthio, heteroarylsulfinyl, heteroarylsulfonyl, halogen, haloalkyl, polyhaloalkyl, polyhaloalkoxy, aminothio, aminosulfinyl, aminosulfonyl, alkylsulfonylamino, alkenylsulfonylamino, alkynylsulfonylamino, arylsulfonylamino, heteroarylsulfonylamino, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl, hydroxy, acyl, carboxy, aminocarbonyl, alkylcarbonyl, alkoxycarbonyl, alkylcarbonyloxy, alkylcarbonylamino, arylcarbonyl, arylcarbonyloxy, arylcarbonylamino, heteroarylcarbonyl, heteroarylcarbonyloxy, heteroarylcarbonylamino, cyano, nitro, alkenylcarbonylamino, alkynylcarbonylamino, alkylaminocarbonylamino, alkenylaminocarbonylamino, alkynylaminocarbonylamino, arylaminocarbonylamino, heteroarylaminocarbonylamino, alkoxycarbonylamino, alkenyloxycarbonylamino, alkynyloxycarbonylamino, aryloxycarbonylamino, heteroaryloxycarbonylamino, aminocarbonylamino, alkylaminocarbonyloxy, alkoxycarbonylamino, I,I-(alkoxyl or aryloxy), alkyl (where the two arvl or alkyl substituents can be independently defined, or linked to one another to form a ring), S(O)<sub>2</sub>R<sup>6</sup>R<sup>7</sup>, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkenyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)alkynyl, -NR<sup>6</sup>(C=NR<sup>7</sup>)heteroaryl, -NR<sup>8</sup>(C=NCN)-amino,

$$-\frac{\prod_{p} Q - \prod_{n} R^{8}}{Q - \left(\frac{1}{p}\right)_{n}}$$

pyridine-N-oxide,